

Listing of the Claims:

- 1 1. (Original) An apparatus comprising:
  - 2 at least one processor;
  - 3 a memory coupled to the at least one processor;
  - 4 a directory service server that accesses a directory that has a plurality of entries,
  - 5 the plurality of entries including at least one proxy entry that contains security
  - 6 information for a corresponding protected resource, the directory service server including
  - 7 authentication and authorization functions that determine whether a selected one of the
  - 8 plurality of entries may be accessed;
  - 9 a plurality of protected resources that are not stored or contained within the
  - 10 directory;
  - 11 an application residing in the memory and executed by the at least one processor,
  - 12 the application including a logical mapping that correlates each protected resource with a
  - 13 corresponding proxy entry, the application determining whether the application is
  - 14 authorized to access a selected protected resource by invoking the authentication and
  - 15 authorization functions in the directory service server to determine whether the proxy
  - 16 entry corresponding to the selected resource may be accessed, and if so, the application
  - 17 accesses the selected protected resource.
- 1 2. (Original) The apparatus of claim 1 wherein the directory service server is a
- 2 Lightweight Directory Access Protocol (LDAP) server, and wherein the directory is an
- 3 LDAP directory.
- 1 3. (Original) The apparatus of claim 1 wherein the application does not access the
- 2 selected protected resource if the proxy entry corresponding to the selected resource
- 3 cannot be accessed.

1 4. (Original) A method for a directory service that contains a proxy entry corresponding  
2 to an external protected resource to provide authentication and authorization functions to  
3 a software application, the method comprising the steps of:

4 (A) when the software application needs to access the external protected resource,  
5 performing the steps of:

6 (A1) identifying a proxy entry that corresponds to the external protected  
7 resource;

8 (A2) the software application requesting from the directory service access  
9 to the proxy entry that corresponds to the external protected resource; and

10 (A3) if the directory service grants access to the proxy entry that  
11 corresponds to the external protected resource, the application accesses the  
12 external protected resource.

1 5. (Original) The method of claim 4 further comprising the step of:

2 (A4) if the directory service denies access to the proxy entry that  
3 corresponds to the external protected resource, the application does not access the  
4 protected resource.

1 6. (Original) A method for a directory service to provide authentication and authorization  
2 functions to a software application, the method comprising the steps of:  
3 (A) determining which of a plurality of resources require protection;  
4 (B) creating a proxy entry in the directory service for each protected resource;  
5 (C) generating a logical mapping that correlates each protected resource to its  
6 corresponding proxy entry;  
7 (D) when the software application needs to access a selected protected resource,  
8 performing the steps of:  
9 (D1) using the logical mapping to identify a proxy entry that corresponds  
10 to the selected protected resource;  
11 (D2) the software application requesting from the directory service access  
12 to the identified proxy entry; and  
13 (D3) if the directory service grants access to the identified proxy entry, the  
14 application accesses the selected protected resource.\

1 7. (Original) The method of claim 6 further comprising the step of:  
2 (D4) if the directory service denies access to the proxy entry that  
3 corresponds to the selected protected resource, the application does not access the  
4 selected protected resource.

- 1 8. (Original) A program product comprising:  
2 (A) a software application that uses a logical mapping that correlates a plurality of  
3 protected resources that are not stored or contained within the directory with  
4 corresponding proxy entries in a directory service that is managed by a directory service  
5 server, the application determining whether the application is authorized to access a  
6 selected protected resource by invoking authentication and authorization functions in the  
7 directory service server to determine whether the proxy entry corresponding to the  
8 selected resource may be accessed, and if so, the application accesses the selected  
9 protected resource; and  
10 (B) computer-readable signal bearing media bearing the software application.
- 1 9. (Original) The program product of claim 8 wherein the signal bearing media  
2 comprises recordable media.
- 1 10. (Original) The program product of claim 8 wherein the signal bearing media  
2 comprises transmission media.
- 1 11. (Original) The program product of claim 8 wherein the directory service server is a  
2 Lightweight Directory Access Protocol (LDAP) server, and wherein the directory is an  
3 LDAP directory.
- 1 12. (Original) The program product of claim 8 wherein the application does not access  
2 the selected protected resource if the proxy entry corresponding to the selected resource  
3 cannot be accessed.

### **STATUS OF THE CLAIMS**

Claims 1-12 were originally filed in this patent application. No claims have been amended. Claims 1-12 are currently pending.